

HOMEMAKING FOR THE HANDICAPPED

Illustrated with photographs and drawings

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LIZABETH ECKHARDT MAY,

NEVA R. WAGGONER and ELEANOR M. BOETTKE

Homemaking for the Handicapped

Homemaking for the Handicapped

DOED.
MEAD



*Dedicated to the handicapped men, women, and
young people in various parts of the world, who
were generous enough to share their achievements
in homemaking*

HALF OF THE ROYALTIES FROM THIS BOOK WILL BE CONTRIBUTED TO
A RESEARCH FUND NAMED IN HONOR OF DR. LILLIAN M. GILBERT.
THE FUND WILL BE ADMINISTERED BY THE AMERICAN HOME ECO-
NOMICS ASSOCIATION FOUNDATION AND WILL BE DEVOTED TO FURTHER
RESEARCH ON THE HOMEMAKING PROBLEMS OF THE HANDICAPPED.

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Library of Congress Catalog Card Number: 66-10890

Printed in the United States of America

Acknowledgments

This book is the result of the work of many dedicated people, both here and abroad. The authors are deeply indebted to them and regret the necessity for limiting the number that can be named.

The idea for the initial research, at the University of Connecticut, on "Work Simplification in the Area of Child Care," came from an industrial engineer, Dr. Lillian M. Gilbreth. As Chief Consultant, she has guided the research and training programs since 1953. Dr. Mary E. Switzer, U.S. Commissioner, Vocational Rehabilitation Administration, approved the grant which helped to finance the initial research, and through her interest and encouragement, has inspired us to continue with our research and to write this book. Mrs. Julia Judson, former Rehabilitation Consultant in Homemaking at the Institute of Physical Medicine and Rehabilitation at the New York Medical Center, has also served as a consultant and has given the program the benefit of her combined training in physical therapy and home management and her experience as a pioneer in research in homemaking for the handicapped.

A book with pictures of persons with physical limitations, engaged in homemaking activities, could never have been written without the generous cooperation of many people who were willing to share their experiences, nor without the cooperation of the professional persons concerned.

The initial research, which included state-wide pilot studies, was made possible through the cooperation of the "Connecticut Team Approach Committee" made up of representatives from health and welfare agencies in the state, and the several schools and colleges of the University. The authors are indebted to all of them and especially to the members of the Steering Committee who spent many hours in giving advice, guidance, and encouragement:

Miss Gertrude Norcross, Executive Director, Connecticut Society for Crippled Children and Adults; Miss Frances Tappan, Assistant Dean of the School of Physical Therapy, University of Connecticut; Mr. Horace Brown, former Director, Connecticut Heart Association, and his successor, Mr. Nicholas Lavnikovich; Miss Ann Switzer, formerly on the state staff of Connecticut Bureau of Vocational Rehabilitation, and Dr. James S. Peters, II, Chief, Connecticut Bureau of Vocational Rehabilitation.

The book also reflects the contributions of special consultants enlisted from several different professional fields: Dr. Charles O. Bechtel, former Chief of Orthopedic Surgery, Yale University Medical School; Miss Jane Callaghan, Consul-

tant in Kitchen Planning; Dr. C. W. H. Erickson, Director, Audio-Visual Aids Center, University of Connecticut; Mr. V. F. Batay and Mr. A. Rye Koch, Regional Directors of the Vocational Rehabilitation Administration and Mr. John L. Schwab and his staff of industrial engineers who advised us on problems of work simplification and contributed the motion picture, "Where There's a Will" (1-121). If space permitted, we would give the recognition they deserve to the administrative and teaching staff of the University who contributed, in various ways, to the writing of this book. Unfortunately we can only name them:

Provost Albert E. Waugh, Dr. John C. Allen, Dean and Medical Director, School of Physical Therapy; Dean Carolyn L. Widmer and Miss Ethel Elliott, School of Nursing; Dr. David Phillips, Head, Speech and Drama Department; Dr. Donald P. Kent, Director, Institute of Gerontology; Dr. Walter McKain, Department of Industrial Sociology; Dr. Harold Smalley and Dr. Arsen Emerzian, Department of Industrial Engineering, and from the School of Home Economics: Miss Mary Bokhar and Dr. Betty Jane Johnston, Dr. Mary Beth Mindon, Miss Eloise Davidson, Home Management Specialist; Miss Helen Chambers, Head of the Department of Clothing, Textiles and Related Art, and Mrs. Louise Johnson; Mrs. Marjorie Lord and Miss Florence Walker, Home Economics Extension Service, and Dr. Victor Christopherson, Department of Child Development and Family Relations.

We are grateful to all of the staff members and graduate students in the School of Home Economics who participated in the initial research project. Space will permit only a few of them to be named here:

Dr. Jessie Wall, Consultant in Child Development, directed the research for Chapters V and VI on creative activities for children and produced a bulletin (1-22) and a motion picture (1-119); Mrs. Gertrude Monhart Zmola served as a Consultant in Home Management, and did much of the field work which resulted in bulletins, teaching slides, and motion pictures (1-116-18, 131-33). Mrs. James H. Whitaker assisted with the field work in connection with the testing of Self-Help Clothing (1-3) and also the films on Child Care (1-115, 120). Mrs. Sylvia Aho, Home Management Specialist, contributed to nearly every section of the book. Mr. Garland Reedy, Industrial Designer, had an important part in developing the adaptations of equipment (A-B). Mrs. Hermine Bigelow did the field work for the pilot study and Mrs. Elizabeth Speare wrote the bulletin on "Where There's a Will" (1-94). Mrs. Ethel de Matia was responsible for the skillful handling of the business aspects of the research. A great deal of credit is due Mrs. Jane Hodges and each of the secretaries who have worked on the research program at the University of Connecticut. The authors are particularly indebted to Mrs. Carl Fischer for her patience and efficiency in preparing the final copy.

The work of the pioneers in various parts of the world has been an important source of information. Dr. Frances Sanderson and Mrs. Hannah Pretzer from Wayne University, and Mrs. Ruth Kettunen from the Michigan State Home Economics Extension Service, and the Michigan Heart Association; Miss Helen McCullough from the University of Illinois; Mrs. Marion Melrose from Minnesota; Mr. George Moore and his Vocational Rehabilitation staff in Rhode Island, and

Miss Theodore Bryce from the Public Health Physical Restoration Center in Saskatchewan, Canada.

The International Society for the Rehabilitation of the Handicapped helped to plan the travel study tours which made it possible to include so many foreign photographs. We are indebted to leaders in many countries for their generous cooperation.

We are also very much indebted to Miss Cecile Hillier, Chief of the Training Division of the Vocational Rehabilitation Administration, and Dr. Jane Bricker, Executive Director of the American Home Economics Association, who co-sponsored a national workshop on Homemaking for the Handicapped (1-145). Our determination to write this book was crystallized by the need for resource materials revealed in this workshop.

Credits for Photographs and Drawings

All photographs except those indicated were made by Jerrold A. Manter, Stems, Connecticut.

All pen and ink drawings except those indicated were made by Miss Eleanor M. Boettke, Associate Professor, Clothing, Textiles and Related Art, School of Home Economics, University of Connecticut.

Australia
Australian Red Cross, N. S. W. Division: p. 116, center.

Canada
Public Health Physical Restoration Center, Courtesy, Saskatchewan Government Photographic Services: p. 3, bottom; p. 121, top left; p. 122, bottom; p. 135, top.

Denmark
Orthopedic Hospital, Copenhagen, Denmark: p. 2, p. 115, p. 125, left; p. 129, top left. Testing and Observation Institute of the Danish National Association for Infantile Paralysis: p. 152.

Finland
Invalid Foundation Orthopedic Hospital, Helsinki, Finland: p. 18, top; p. 116, top left; p. 117, bottom right; p. 123, center—Eero Tolvanen, Photographer; Kivela Hospital, Helsinki, Finland—Eero Tolvanen, Photographer: p. 130, top; School Foundation of Cripples, Helsinki, Finland—Eero Tolvanen, Photographer; Jacket: p. 7, top; p. 117, bottom left.

France
Raymond Poincaré Hospital, Carrières, France: p. 121, bottom right; p. 126, p. 132, bottom right.

Great Britain
Hampshire County Council: p. 158.
C. Wyllie Noble, F.R.I.B.A., Research Architect for The Central Council for the Care of Cripples, London: p. 129, bottom right.

Foreword

My association with the authors of this book during the past twelve years has been an exciting experience. Their first achievement, a "Leaders Workshop on Work Simplification in Homemaking for the Handicapped," in 1953, formed the basis for a second workshop on the "Team Approach" to the same problem, in 1955. The significant thing in this book was the wide range of professions represented. The usual members of the rehabilitation team were there: doctors, nurses, therapists, social workers, public health workers, psychologists, and rehabilitation counselors—but the unique feature was the participation of representative homemakers and members of their families and resource persons from industrial engineering, architecture, and specialists in the various areas of home economics.

This book is based on not only the results of the initial five-year research program (1955-1960) co-sponsored by the U.S. Office of Vocational Rehabilitation and the School of Home Economics at the University of Connecticut, but also on the results of the thirty workshops in which the authors have participated. It also includes the results of continuing research on the part of the authors and visits to nearly two hundred rehabilitation centers in the United States, ten northern European countries, India, and Pakistan.

The fact that has really impressed me most in studying these international reports is the extent to which the rehabilitation of any handicapped person is determined by his own attitude toward his physical potential and his limitations and by the support and cooperation he receives from his family. These factors appear to me to have even greater significance than the nature or extent of his disability, or the financial resources of the family, or such material items as tools and equipment.

In the chapters that follow, valiant men, women, and young people and their families in various parts of the world demonstrate again the truth of the old proverb—"Where there's a will, there's a way!"

Lillian M. Gilbreth

New York
April, 1965

Introduction

There are nearly 40 million women "keeping house" in the United States. The multiplicity of skills they must possess and the hours they must work are matched by few requirements for jobs held by men. If an arbitrary value were placed upon the homemaker's services, and she were paid accordingly, her annual wage would be, to say the least, substantial.

Thus, when a housewife is unable to perform her duties, an economic benefit to the nation is lost. Far worse, the family upon which she has focused all her efforts will suffer or even disintegrate.

Among those women whose usual activity is keeping house there are 4,600,000, or nearly 12 per cent, who are victims of such disabilities as faulty vision, arthritis, paralysis, or circulatory disease. These handicaps, in one manner or another, limit them in the performance of household tasks. More than 320,000 others are so severely disabled that they are unable to keep house at all.

The restoration of disabled homemakers has for twenty years been a part of the Federal-State program of vocational rehabilitation in recognition of the fact that, though homemakers do not work for a wage as do most of our rehabilitants, their jobs are nevertheless indispensable to the national economy. Since 1945, the public vocational rehabilitation program has restored about 184,283 disabled homemakers to a point where they can again perform well in this demanding field of endeavor. Obviously, much remains to be done.

I hope this book by Elizabeth Eckhardt May and Neva B. Waggoner, who have been long-time associates in research in homemaking for the handicapped, and Eleanor Boettke, whom I know by her fine reputation as a clothing designer, will point the way for many more disabled homemakers to return to their highly skilled and completely indispensable jobs of keeping families healthy, happy, well-fed, and, above all, together.

Mary E. Switzer

Commissioner of Vocational Rehabilitation

Department of Health, Education, and Welfare

Washington, D.C.

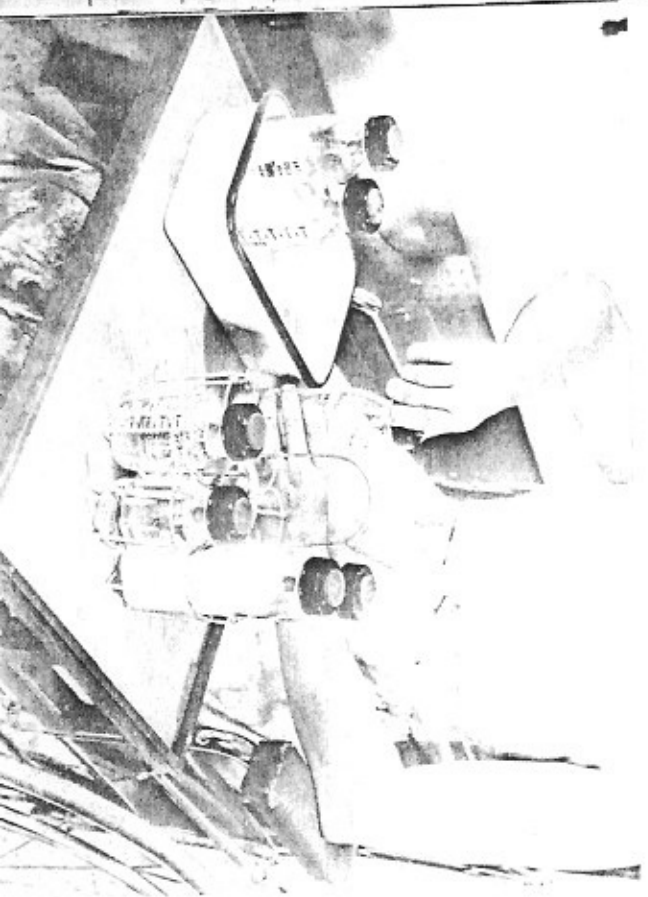
April, 1966



E. After the sterilization period is over and the kettle has cooled, the bottles are removed. This is her most difficult operation, since the stove is a standard 36-inch height that could not be lowered to the 30-inch comfortable counter height.

F. To transport things and to provide a very convenient work surface, she likes this easy-to-attach wheelchair tray which was made to fit her chair.

G. She sets the bottles in a pan for storage in the refrigerator. The tray makes a convenient work surface, since she expects to use it also for transportation of the bottles to the refrigerator.



Work Simplification in the Physical Care of Children

CHAPTER 4

Many physically handicapped young women have proved that a disability is not necessarily a barrier to childbearing.¹

The decision on whether or not to have a child should not be made by anxious relatives, but rather by the family doctor and the two people chiefly concerned.

Another decision to be made by the parents is whether or not the mother will take over the care of her children, as far as her physical limitations will permit. This is her right and privilege, but if she undertakes this task, it may then be necessary for other members of the family to take over some of the routine housekeeping chores. Decisions must be made concerning which tasks the mother will do, which will be done by someone else, and, also, which are unnecessary and therefore can be eliminated.

¹ A Connecticut study of 100 orthopedically handicapped young mothers showed that 107 of their 225 children were born after the disability occurred.





When a mother chooses to take care of her baby, it is important for her to begin as early as possible to have some part in his care. Young babies are amazingly adaptable and cooperative. An infant will learn to cooperate by holding on if he feels insecure, by raising his body for diapering, or by leaning against his mother as she carries him in her lap in the wheelchair.

Mastering routine tasks will not only give the mother confidence and competence that will carry over into other tasks, but will also help in the development of basic trust and cooperation between the mother and child.

Although these suggestions are intended primarily for mothers with physical limitations, they apply to fathers, too!



Guides for the Selection of Child Care Equipment

The determining factor, in whether or not a mother can be independent in caring for her child, may depend on the equipment available. Even though it is used for a relatively short time it is worth the effort to select and adapt the equipment to suit the mother's particular needs. This will give her a feeling of independence and self-confidence and the personal satisfaction of knowing that she can assume at least part of her normal role.

In selecting new equipment these questions should be considered:

Is it equipment manageable within the mother's limitations?
Is it adjustable in height? Can it be moved easily? Does it have easily manipulated controls?

Is it suitable for more than one use and over a long period of time? Is it sturdy and durable? Is it adaptable to the rapid growth of the child? Is it easy to care for?

Does it help in promoting early independence in the child?

Is it safe for both the mother and the child?

There is no single piece of equipment suited to a specific disability. Each mother must choose what most effectively meets her particular limitations, her family budget, and her personal desires. If necessary, it may then be adapted to her special needs. Special care should be given to safety; the latches on cribs and play pens should lock securely, be easy to operate, and of the type that can be manipulated by the mother but not by the child.

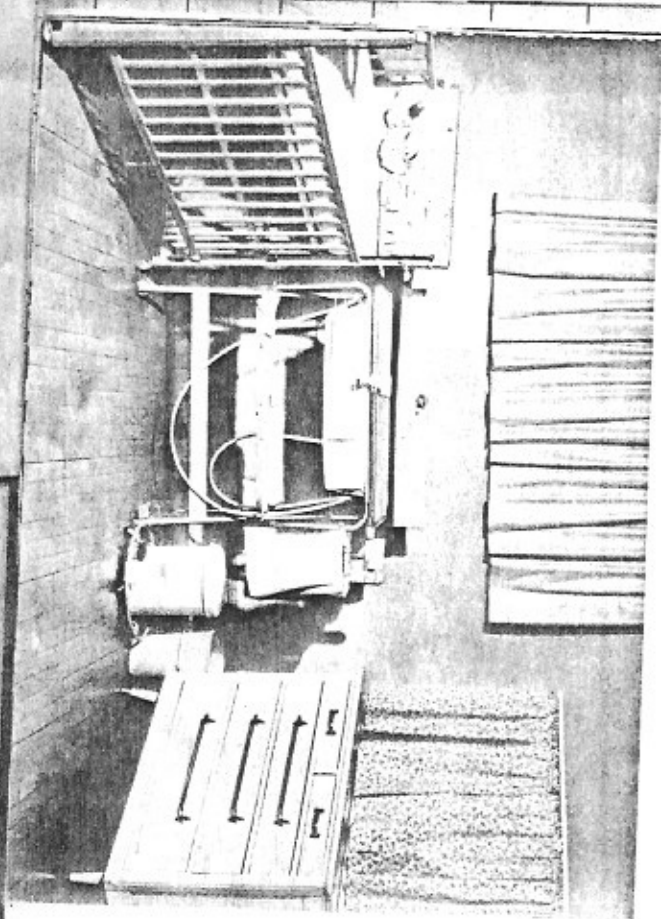
Work Centers for Caring for Children

Items of equipment should never be selected as single objects but rather in their relationship to the total performance of a task. They should be part of a work center where a specific task can be carried through all of its stages: getting ready, doing the job, and cleanup. Most tasks related to child care can be accomplished with fewer steps, less fatigue and with greater ease and safety if thoughtful planning is done in advance. This applies to not only the bathing of a baby but to food preparation, laundry, cleaning up and all of the other housekeeping tasks.

Since infants are often diapered and dressed wherever they happen to be in the home at different times of the day, simple equipment should be duplicated if possible. Steps can also be saved by having more than one storage area for items that are used frequently, such as diapers.

Check List for Developing Work Centers

1. Is the center located in the most convenient place, with sufficient space to allow free movement of wheelchairs or wheeled carts?
2. Is the equipment arranged for easy flow of work and so as to eliminate lifting from one area to another?
3. Is there adequate storage for materials, tools, and utensils, arranged so as to be easy to see, easy to reach, easy to grasp? If not, have provisions been made for easy ways to transport them by basket, tray, wheeled cart, or some other method?
4. Is the work surface planned at a comfortable height for the person using it? If not, can either the seat or the working surface be adjusted in height?
5. Is there provision for a work surface with adequate knee room for sitting to work for at least part of the job?
6. Is there a seat of comfortable height and depth to allow the person to maintain good body posture?
7. Are working surfaces, storage facilities, and equipment planned to facilitate easy cleanup?
8. Is the equipment used at the center chosen with the limitations of the person's disability in mind, or can it be adapted to suit her special needs?



Work Simplification Principles Applied to the Job of Bathing a Baby By a Mother Limited to the Use of Her Right Hand

Step One: Study the Job to be Done

What is the job?

To bathe and dress the baby.

Who will do it?

The mother wants to do it herself.

When will she do it?

Any time during the day that is most convenient for the mother.

Where will she do it? Any place she can arrange a comfortable workplace.

How will she do it? This mother took into account her own physical limitations and the resources of her family in money, time, and skills. She reduced to a minimum the amount of walking, stooping, stretching, bending, lifting and carrying in order to conserve both time and energy and yet maintain high standards of safety for her baby and for herself.

Step Two: Selection and Arrangement of Equipment

THE CRIB has an adjustable spring which permits the raising of the mattress to a comfortable working height. The foot-lever makes it possible to lower the side of crib to the level of the mattress and leaves the arm free for easier lifting.

THE BATHNETTE combines a dressing table, tub and clothes storage area. It includes a foot pedal to raise the table when the mother is ready to transfer the baby to the tub, a hammock in the tub to support the baby and a hose to empty the tub easily. The shelf provides easy-to-reach storage for clothes. A laundry bag is attached.

THE STEP-ON DIAPER PAIL, on a dolly, can be opened easily or moved with the foot.

THE CLOTHES STORAGE consists of two stacked chests which provide easy to reach storage, easy to grasp handles and easy to open curtains. Because of careful planning the mother need never risk leaving her child unguarded.

Step Three: Procedure in Bathing the Baby

Before the bath starts, towels and clean clothes that will be needed are selected and placed within easy reach in the order in which they will be used. The mother uses the "knee to shoulder" height storage for frequently used items to avoid stooping and stretching.

She wears a terry cloth cobbler's apron to protect her dress during the bathing process.

Water of the right temperature is brought from the bathroom in this lightweight plastic rectangular pail which is easy to rest against the tub. The bathinette foot pedal is used to raise the table.

To take the child from the crib she bends her body over the crib and slides her elbow and forearm down to support the baby's back and her hand to support his head. Her entire arm and all of her fingers help to hold the baby safely.

As she undresses the baby, she drops the soiled clothes directly into the ham-dry bag and the diaper into the diaper pail. This keeps her work area clear.



The hammock in the bathinette tub supports the baby in the bath water much as a second hand would do. Carefully selected equipment makes it possible for her to do this job.

After lifting the baby from the bath, she lays him on a towel which was placed on the top of the bathinette before the bathing began. A receiving blanket placed under the towel is ready to place him on for the dressing process. Dot fasteners are used on the diapers.

In dressing the baby, she uses garments that open all the way down the front. She opens the sleeve with her fingers so she can slip it comfortably over the baby's hand. After putting on one sleeve, she slips the garment under his back and rolls him over gently to put on the second sleeve.



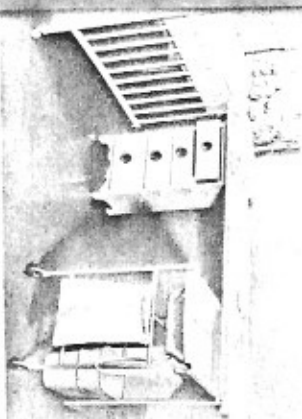
To keep the baby secure when she must step away from the work table to prepare his bed, she fastens the safety belt. The baby is now ready for bed.



Step Four: Cleanup

To leave the bathinette ready for its next use, she drains the tub into the plastic pail with the gravity drain hose and wipes it clean and dry.

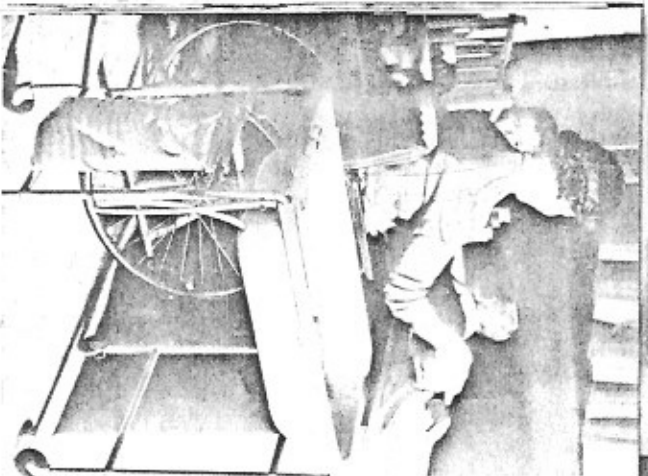
After the tub is drained and wiped clean, and the bath table is down for next use, the storage curtains are closed. The job is accomplished within the limitations of her handicaps and with a minimum of walking, stooping, stretching, bending, and lifting.



Bathing and Dressing Center for the Mother Who Sits to Work

Desirable Features

1. **ARRANGEMENT.**
Equipment arranged to permit easy flow of work. The baby is transferred from the crib, to the dressing table, to the bath, with a minimum of effort.
2. **THE CRIB.**
Wooden frame under mattress raises it to a comfortable height for lifting the baby.
Side of crib hinged so it may be dropped to make it easier to lift the baby.



3. DRESSING TABLE. (A)

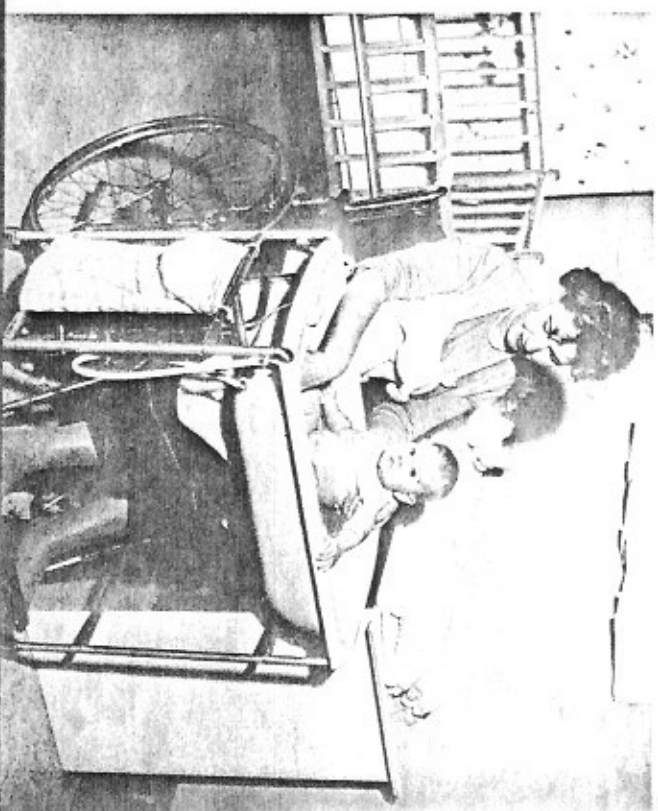
Easy-to-reach clothing storage.
Easy-to-grasp drawer pulls.

4. BATHING UNIT. (A)

Comfortable working height, with knee room to permit dressing in a forward position.

Standard plastic tub, slanting contour bottom with foam rubber pad to support baby. (Turkish towel may be substituted for foam rubber.)

Light mobile frame for tub, with casters to facilitate filling and draining. Gravity drain makes it easy to empty. Tub may be stored under counter when not in use.



The Kitchen Sink for Baby Bathing (B)

1. ADVANTAGES.

Furnishes sturdy support.

Easy to fill and drain.

Comfortable and safe for mother in wheelchair; when it is lowered to a comfortable height and knee room is provided, the mother can work in a forward position.

May also be used by mother working from a standing position if the height is comfortable.

2. SAFEGUARDS.

Rubber cover on faucet necessary to protect baby's head.

Towel or sponge rubber necessary on bottom of sink or on drainboard to prevent slipping.



Baby Bathing with Simple Equipment

A Wash Basin on a Card Table

A card table covered with an ordinary bed pad and a bath towel can serve as a bathing and dressing table for a wheelchair mother, since it allows knee room and permits her to work in a forward position. All of the bathing and dressing supplies should be placed on a table or wheeled cart nearby in order of use, before the bath begins. This makes it unnecessary for the mother to leave the baby unguarded.

The Family Bathtub for Baby Bathing

The conventional family bathtub has proved to be hazardous for many people and is ordinarily avoided by mothers with physical limitations when bathing very young children. There are a few advantages, however, in that bathtubs are easy to fill and drain. Some mothers manage by sitting close to the tub on a low stool with non-skid pads on the legs, or better still on a hassock that will not tip or skid. A small plastic tub set inside the family tub is sometimes used.

Safety precautions are necessary for anyone using a bathtub. Always place a towel or, better still, a rubber mat held by suction cups in the bottom of the tub to prevent slipping. Install grab bars on both sides of the tub within the reach of children, or anyone else using the tub. Raise tub to a more convenient height if possible. Teach the child safety measures as early as possible. A bath seat with a safety strap and suction cups sometimes makes it possible to bathe young children in the tub.



Feeding Tables and Chairs

Feeding Tables

Strain is diminished if the legs of the feeding table can be extended to allow knee room for the mother to work in a forward position.

Highchairs

Highchairs bring the child to the level of the family table. Trays that can be released on one side of the chair and dropped on the other, have advantages for the mother with hand limitations.

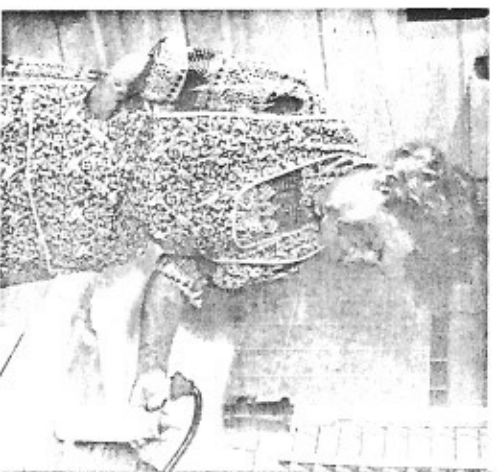
Chair Seats for Children

When the child grows older, a small seat on an adult-size chair will raise him to table height.

The Selection of Feeding Equipment

Bottles, Nipples, Formulas

Wide-mouthed bottles are easier to clean and to fill. Nipples with caps that screw on are easier to manage than those that pull on. Bottles may be heat-proof glass, plastic, or disposable bottles. Pre-sterilized formula preparations in disposable cans and bottles are now available. All formula preparations, must of course, be checked with a physician.



Safety Precautions for Highchairs and Feeding Tables

Adjustable foot rest adds to the child's comfort and safety.

Locking devices must be dependable and easy to manipulate.

Trays should be easy to clean.

Safety straps provided by the manufacturer are sometimes difficult for a person with hand involvements to operate. A dog leash snap fastened to a homemade strap of soft cotton webbing may be easier to manage.

A combination of roomy pants attached to a slip cover which may be put over the back of the high chair, prevents the child from slipping through. (A)

The Selection of Toileting Equipment

Advantages and disadvantages should be considered before purchasing.

Points to Consider

1. TOILET SEAT TO FIT OVER CONVENTIONAL TOILET

Is it sturdy and well made?

Does it fasten easily and securely without tilting and furnish the support needed?

Can he climb up to it safely with the help of a stool or can someone lift him? Will the toilet seat fold easily for storage?

2. TOILET CHAIRS

When the child is very young a toilet chair may be put on a low table or platform if the mother has difficulty in bending.

When the toilet chair is on floor level the child may be able to use it by himself.

A single purpose toilet chair makes toilet training easier.

A folding toilet chair can be easily transported and avoids interrupting toilet training in travel.

A plastic portable urinal with a lid is useful for small boys. A very young child can be taught to use the urinal alone and can also learn to empty it properly.

Plastic Seats for Infants

Portable plastic seats for infants are well padded and include a safety strap. This device offers stability for feeding and transporting a baby.

The Selection of a Play Pen

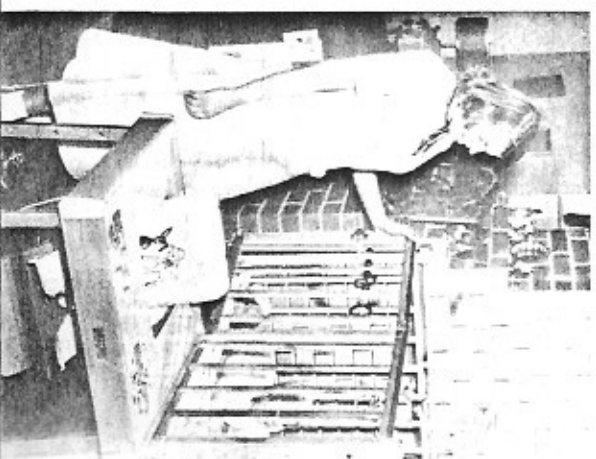
Points to Consider

What size will fit into the space available? Will it be necessary to fold it when not in use? Is it sturdy enough to be moved about and to withstand rough wear? Is it safe for the child; are catches, bolts, hinges and locks of the type that a child cannot operate or cannot pinch his fingers? Are the sides such that he cannot climb over? Can the person caring for the child operate the locks? Can the child be lifted in and out of the play pen without undue strain?

PLAY PENS WITH FOLD-DOWN SIDES. The fold-down side reduces the height and makes it possible for the wheelchair mother to lift her child in and out and also to clean the pen more easily.

MESH-TYPE PLAY PENS. The side of the mesh-type play pen can be let down easily. The pen folds easily and can also be used as a bed. The mesh is fairly "climb-proof."

RAISED PLAY PENS. A mother limited to the use of one arm, and with difficulty in bending, will find a floor level play pen impossible to use. The problem may be solved by extending the legs and raising the level to approximately 27 inches. A gate cut in the side makes it much easier to reach in to lift the baby. This same adaptation may have advantages for a mother confined to a wheelchair (A).



Clothes for Infants

Mothers will have fewer problems if when they select baby's clothes, they remember that comfort for the baby, and convenience for the mother, are the primary concerns. Beyond the essentials of diapers, shirts and sleeping garments there are the frills. These may create dressing or care problems, but may give the mother great satisfaction. Clothing that can be opened flat, so the baby can be placed easily into the garment, are a great advantage in dressing and in changing diapers.

General Suggestions for Buying Infants' Wear

A. DIAPERS may be selected in different fabrics, sizes and shapes. The most important quality is the absorbency but there are other factors to consider, such as fastening, drying time and styles which might help mother to save her energy and time. If a commercial diaper service is available and is approved by the physician, it would certainly be worth considering.

Fabric Choices

Gauze: light weight, non-bulky, absorbent, quick-drying.

Stretch Gauze: all the qualities of regular gauze plus stretch to fit.

Birdseye: heavier but durable and absorbent diaper fabric, slower to dry than gauze.

Knitted: very absorbent, holds shape well but slower to dry, stretches to fit.

Disposable: good absorbency, useful for travel. May cause irritation with regular use.

Design Choices

Square or rectangular shapes (27"x27" or 20"x40") can be folded to give maximum protection.

Prefolded styles save time and energy.

Tubular styles stretch easily to fit and eliminates folding.

Contour styles are shaped to fit and are adjustable around the waist and in length.

Disposable Diapers are made of layers of cellulose backed with waterproof paper.

Diaper liners used inside cloth diapers are made of a knitted material that does not hold moisture. They add to comfort especially during sleeping periods.

B. PROTECTIVE PANTIES are made in a number of styles and a variety of fabrics. A style that opens flat will permit easier dressing and quick diaper changes with less handling. Pediatricians vary in their recommendations concerning the use of protective panties.

C. SHIRTS. Double-breasted shirt styles are easy to put on and fasten easily with tape-reinforced straps. Stretch shirts of cotton and nylon dry quickly, won't shrink, and add to baby's comfort. If tubular style shirts are selected, they should overlap in the shoulder area to make dressing easier. Shirts should have tapes that snap or pin to diapers.

D. KIMONOS OR NIGHTGOWNS are the traditional infants' garment. They are easy to put on because they open flat or have long openings. Avoid ribbons around the neck. The one-piece stretch garment with feet and a long center front opening that extends into the entire crotch area is becoming the popular all-purpose infants' garment. The size of the garment must be checked often to be sure there is adequate room for movement and growth.

E. SWEATERS AND SACKS should open all the way down the front and have raglan sleeves for adequate growing room and easy dressing.

F. BUNTINGS are a good choice for outdoor wear because they keep the baby comfortably warm. It is easier to handle a baby in a bunting than one wrapped in a blanket. There are two styles: One is like an envelope with a hood. The baby is completely covered except for his face. The other style is two-piece and has, in addition, a jacket top with long sleeves and attached mittens. The bunting must be large enough to allow room for the baby to move easily. Some bunnings have "growth tucks" so they can be lengthened as the child grows.

G. BIMS made of absorbent material are most satisfactory. The point to check is the method of fastening. Velcro may sometimes be substituted for ties.

H. BONNETS, CAPS, AND HOODS. Simple styles with side fasteners are to be preferred to those that tie under the chin. The comfort of the child and the convenience of the mother are primary concerns.

I. BOOTIES AND SOCKS. For warmth, knee socks have advantages over booties.

CHAPTER 5

Developing Early Independence and Cooperative Behavior in Young Children

The task of bringing up children is a complex problem for all mothers, and they are sure to have doubts and uncertainties. For the mother with physical limitations, this feeling of inadequacy is amplified. She may question her ability to perform the necessary tasks, to meet emergencies, and to find the best ways to guide the growth and development of her children. Her self-confidence may suffer even more if other family members question whether she is equal to this responsibility.

Judging from the experience of the mothers who contributed ideas to this book, physical limitations need not be a bar to being a good mother. The fact that she must stay at home may even have its advantages. Children develop a sense of security because they know they can count on her being there when they need her. Since she cannot depend on strength and speed

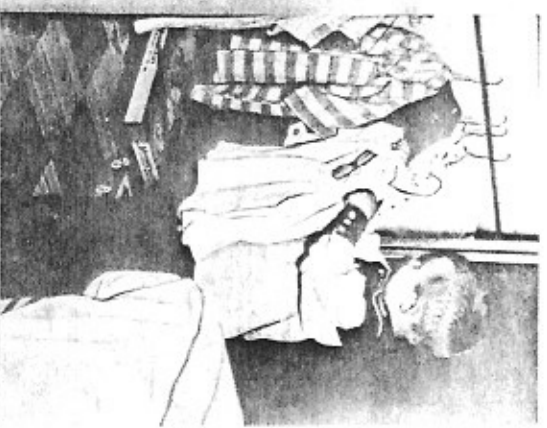
to enforce obedience, a handicapped mother must build a basic trust between herself and her children and win cooperative behavior. This will challenge her patience, her imagination, and her ingenuity.

The development of cooperative behavior may begin at any age, but it is a gradual process. A mother must understand what is reasonable to expect of a child at each stage of his development. If he is physically able to do a task, and if he wants to do it, he should be encouraged to do it regardless of his age. Success in one activity will help him to develop the skill and self-confidence he needs to do more difficult tasks.

The Importance of Play Activities

Since play activities fill most of the child's day, it is important for the mother to take advantage of the opportunities they offer for developing initiative, creativeness, unselfishness, cooperativeness, gentleness, kindness, and many other desirable traits. This chapter suggests activities which children may share with adults or with other children, along with those which they may carry on independently.

Since young children enjoy being near their mothers, it is wise to have small play centers in each of the rooms where the mother is likely to spend a considerable amount of her time. Such areas can be more easily supervised than a separate game room and offer more opportunity for friendly companionship between the mother and her children.





Outdoor Play Supervised from the Indoors

The problem of giving children the opportunity for free outdoor play is not an easy one for a handicapped mother. One mother worked out a clever plan by fencing in a play area adjoining the house so that it can be supervised from the window or doorway. The only entrance is through the house. This is a safety factor and also gives her control over the number of children who use the play area at one time. She invites the neighbors' children to use the yard, and in exchange, their mothers often include her children on trips where she would find it impossible to take them.

If a yard can include a driveway, children can use their tricycles and other wheeled toys. A grassy spot with climbing equipment is another fine feature, and a sand box or a place for digging makes the place ideal.

By using a ramp some mothers can join their children in outdoor games. Many ball games do not require running, and anyone with a good voice can be an umpire even though she is in a wheelchair. Storytelling, nature study, dramatics, music, and crafts are only a few of the activities where mothers in wheelchairs can join in children's play (1-22).

Outdoor Play Equipment

A great assortment of outdoor equipment may be purchased but much of it can be built at home (1-22). Problems of

safety are the first concern. Some pieces, such as a trampoline, can be very dangerous and should not be used without direct supervision and strict regulations.

The Sand Box

The sand box is probably the most popular piece of equipment and can be a place where children learn to share and to respect each other's rights. If children help to make the rules governing the sand box, they are more likely to follow them.

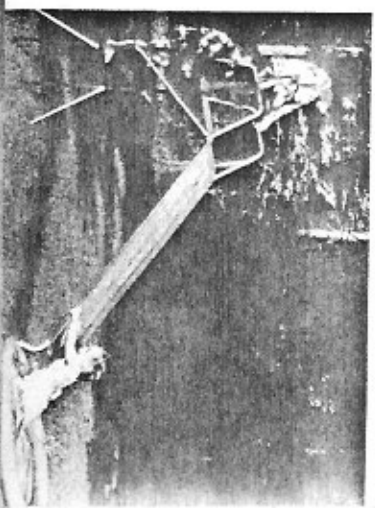
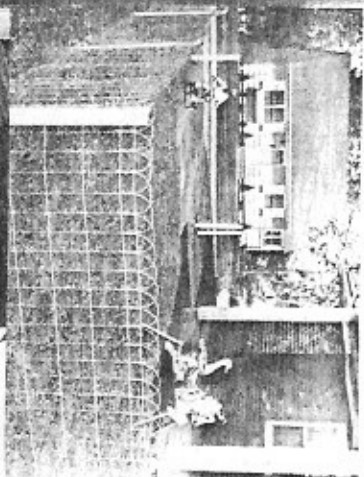
The simplest sand box is made of four logs used to enclose a heap of sand. If the sand box has a floor with small drain holes and is raised off the ground, the sand is more likely to stay dry. Corners made of boards provide seats and are also a good place to put out molds of cupcakes and sand pies. Simple household equipment free from sharp edges or pointed ends is good for sand box play—cans with smooth edges, muffin pans, pie pans, large spoons, scoops, sifters, or flower pots.

A sand box with wheels has advantages, since it can be moved to sun or shade or even into the garage on a rainy day. A canopy is fine for shade and can sometimes be used as a cover when the box is not in use. In any case, the box should have a waterproof cover to protect it from the weather, and also from stray cats!

Water Play

Plastic pools are fun, but large dishpans and old-fashioned wash tubs can be used instead, or a sprinkler, or simply going out in a warm rain.

Another idea for outdoor fun is to use just plain water as though it were paint. With a man-sized brush a child can paint the fence, the steps, or almost anything. Blowing soap bubbles is more fun out of doors than indoors, since there is no need for being careful of dripping.



Something to Swing On

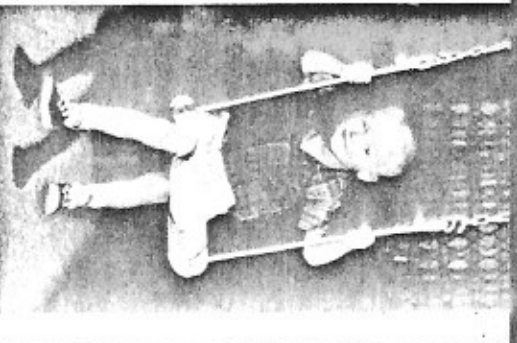
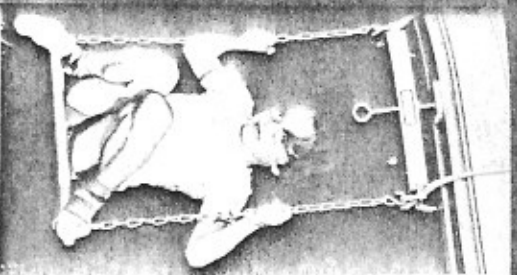
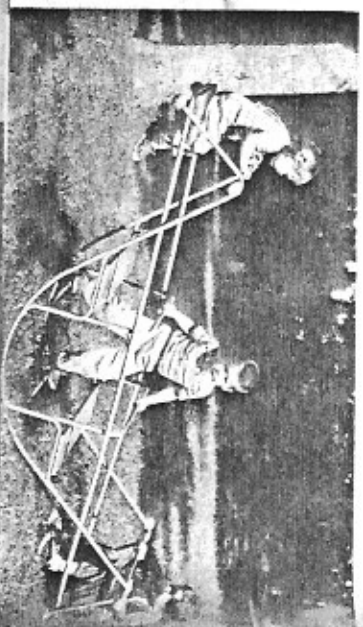
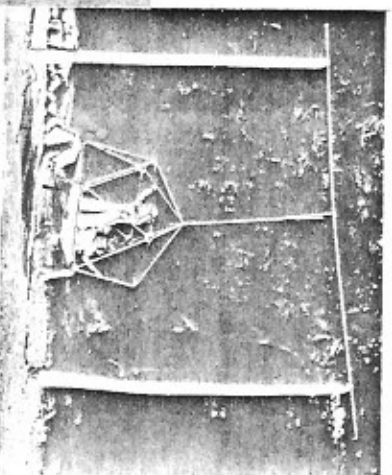
A satellite swing is fine, but a rubber tire or a rope with a knot or a small board can provide the same fun. A tree with just the right limb is a good place to hang an old-fashioned rope swing.

Something to Climb On

Slides and jungle gyms may be purchased, but a good substitute can be made from a sturdy ladder that is well supported at the ends and placed just high enough to be grasped by jumping.

Something to Rock On

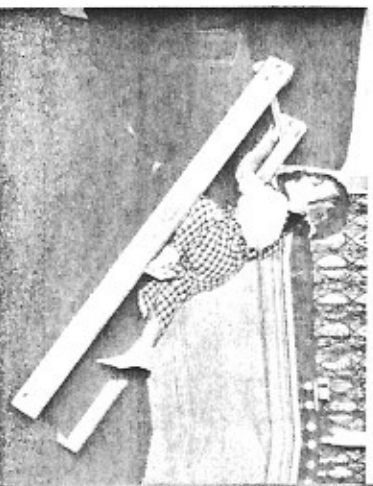
Rocking teeter-boards can be purchased, but a simple one can be made of a plank over a solid center support like a sawhorse, or it may be supported on the axle between two old wagon wheels.



Active Indoor Play

Since children need activity and are sure to be noisy some of the time, there must be some arrangement in every home for active play. A wise mother soon learns that noise can be tolerated more easily if she plays with her children.

An indoor gym provides for many different activities and takes little space. Various pieces of equipment may be attached to a single hanger on a door frame (1-22). This can be left in position when equipment is not in use. Even a three-year-old can add a great deal to his skill and self-confidence by mastering the task of adjusting equipment to his own height. A child as young as eighteen months can climb a swinging ladder. A small slide placed on the end of a sofa or chair gives a toddler an opportunity for hours of fun and good exercise. (H-Child Life and Play Specialty Assoc.)



Select Safe Toys for Children

Because of his short interest span, a child will need several toys, but he should not be overloaded. Toys should have more than one use; those a child can either play with alone or with other children are good investments. The price of the toy is not necessarily an indication of its worth.

Since a handicapped mother may be limited in her ability to meet emergencies, it is important for her to give special attention to safety in selecting toys. Here are points to consider:

1. **SIZE.** They should be too large to put into mouth, nose, or ears.
2. **DECORATIONS.** Avoid small decorations that can come off and be swallowed, such as button eyes on animals, bells, small wheels.
3. **CONSTRUCTION.** Look for sturdy construction that cannot be taken apart and that will tolerate rough wear without breaking. Avoid sharp edges or pointed ends.
4. **WASHABILITY.** Avoid hairy toys that might lose their fur and those that are not completely washable.
5. **PAINT.** Be sure toys are painted with non-toxic paint. Paints containing lead compounds may be poisonous to children.
6. **HANDLES.** All handles on push-pull toys should be protected with a large knob or bar.



Safety Gates

Since the handicapped mother may not be able to move quickly to rescue her child from accidents, safety gates are a necessity to close off all stairways or rooms the mother cannot supervise. A folding extendable type which is fastened to the door frame is usually satisfactory. One should be sure the lock can be manipulated by the mother but not by the child.

Storage of Toys

Each toy ought to have a special storage place of its own. Learning to take care of his toys is an important part of a child's training; if he is old enough to get them out, he is old enough to put them away! A child does not have an adult attitude toward neatness and order. He will need a convenient and logical space with plenty of room for storage, and a considerable amount of guidance and encouragement. Only a few toys should be out at one time. If the space where each toy is to be stored is marked out with crayon, the child will learn to put things where they belong.

A toy cart, which a very young child can pull, is especially valuable in a home where a mother has difficulty in picking up things from the floor. For a toddler, the handle of the cart should go across the entire end so that it is easier to maneuver in a small space. A cart equipped with bells makes it easy for a mother to know where her child is playing. A cardboard box with a clothesline rope handle makes a good temporary cart.

Music, Dramatics, Art and Nature Study for Young Children

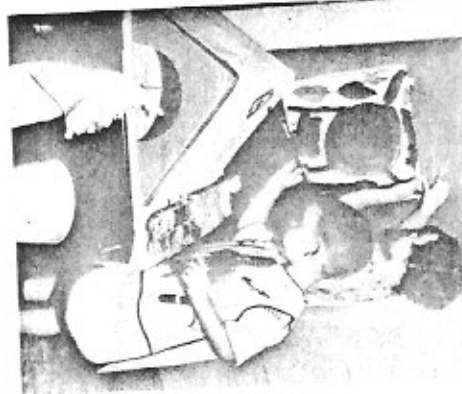
Sharing Musical Experiences

Music in all of its forms offers a wonderful opportunity for parents and children to join together in something that is fun to do. Suitable musical instruments present the child with an opportunity to experiment with sounds. Many "toy" instruments are disappointing to children because they cannot be accurately tuned and the sound is often unpleasant.

Homemade Instruments

Children learn something of sound and rhythm from simple devices. A pie tin does not sound too loud if it is pounded with a padded stick. Clothespins in a cardboard carton make a wonderful rattle. Children learn different kinds of sounds and rhythm, by drumming on cans or cartons of various sizes.

Some children enjoy keeping time when music is being played. If the mother can demonstrate the possibilities, they learn to experiment with fast and slow rhythms and with loud and soft sounds.



Homemade Playthings

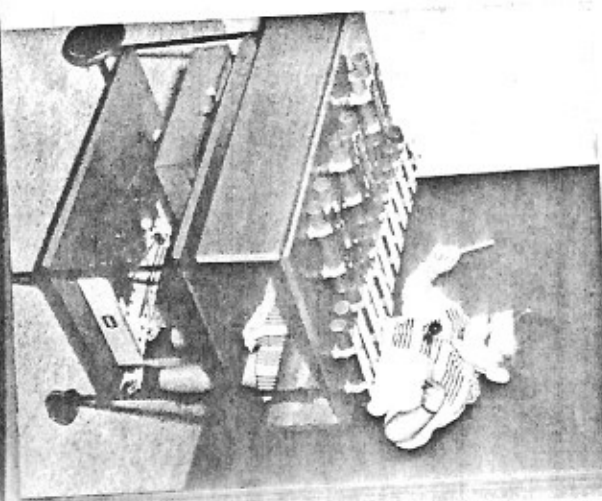
Children often have much more fun with homemade toys that *merely suggest an idea* than they do with commercial toys complete in every detail. Here are some simple ideas:

BEGIN WITH A BOX. Add cardboard wings and it's an airplane. Add paddles and make a boat. Add a steering wheel and some coffee cans for headlights and it's a car. Cut in windows and doors and it's a house or a garage. Tie on some clothesline for a handle and it's a sled, a wagon, or a toy cart. Add rockers and it's a doll cradle. Add a roof, a tin can for a silo, and it's a barn.

BEGIN WITH A RUBBER TIRE. (Spar varnish keeps black from rubbing off.) Suspend it with a rope from a tree and use it as a swing. Suspend two of them from a low limb and put a board between them for a low swing. Fill the center section of a large tire with sand to make a sand pile for a young child.

BEGIN WITH A HOMEMADE EASEL. (To make the easel, cut a box in half to form a triangle, and put it on a table.) Provide paper, chalk, or water color and brush, and let imaginations take over from then on!

BEGIN WITH A ROPE. Tie a loop in one end, tie it to a limb, and you have a rope to climb. Tie the two ends securely over a stout limb, add a board notched on each side for a seat, and you have a swing.



Homemaking for the Handicapped

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WITH REHABILITATION

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DODD, MEAD & COMPANY, NEW YORK